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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------------|------------------------|
| 10/721,429 | 11/26/2003 | Shigeo Nishiguchi | KATA-187 | 6569 |
| 217 7590 06/21/2007 FISHER, CHRISTEN & SABOL 1725 K STREET, N.W. SUITE 1108 WASHINGTON, DC 20006 | | | EXAMINER FEELY, MICHAEL J | |
| | | | ART UNIT 1712 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/721,429

Applicant(s)

NISHIGUCHI ET AL.

Examiner

Michael J. Feely

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-21 is/are pending in the application.
- 4a) Of the above claim(s) 6-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Pending Claims

Claims 1 and 3-21 are pending.

Election/Restrictions

1. Applicant's election of Group I (claims 1-5) in the reply filed on March 29, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 6-21 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on March 29, 2007.

Response to Amendment

3. The rejection of claims 1 and 3-5 under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling, has been overcome by amendment.
4. The rejection of claim 4 under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling, has been overcome by amendment.
5. The rejection of claims 1 and 3-5 under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, has been overcome by amendment.
6. The rejection of claim 4 under 35 U.S.C. 112, second paragraph, has been overcome by amendment.

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7. The rejection of claims 1 and 5 under 35 U.S.C. 102(e) as being anticipated by Ogawa et al. (US Pat. No. 6,756,420) has been overcome by amendment.

8. The rejection of claim 3 under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. (US Pat. No. 6,756,420) has been overcome by amendment.

Claim Objections

9. Claim 5 is objected to because of the following informalities: both the cross-linking agent and the polymerizable unsaturated group-containing compound are referenced by "(B)". Appropriate correction is required.

Claim Rejections - 35 USC § 103

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bremser et al. (US 2003/0127332 or WO 01/64523). These are equivalent documents, and all citations are directed to the US publication.

Regarding claims 1, 4, and 5, Bremser et al. disclose: (I) a cationic electro-deposition coating composition (Abstract) containing (A) an unsaturated group-modified cationic epoxy resin having a cationic group (Abstract; paragraphs 0053-0068); (B) a cross-linking agent (paragraphs 0085-0086), and (C) a photo-polymerization initiator (paragraphs 0087-0090), the unsaturated group-modified cationic epoxy resin (A) having the cationic group being obtained by reacting an epoxy resin (a) having an epoxy equivalent of 180 to 2500 (paragraph 0060) with an

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unsaturated group-containing compound (b) (paragraphs 0055-0056) and a cationic group-containing compound (c) (paragraphs 0057-0068); (4) wherein the epoxy resin (a) having an epoxy equivalent of 180 to 2500 is obtained by reacting a poly-phenol compound and an epihalohydrin (paragraph 0060); and (5) wherein the cationic electro-deposition coating composition further contains a polymerizable unsaturated group containing compound (paragraphs 0088-0089).

Bremser et al. disclose the use of dual cure systems, wherein the coating material is curable both thermally and with actinic radiation (*see paragraph 0087*). This embodiment employs both a photo-initiator (*see paragraph 0090*) and thermal cross-linking agent (*see paragraphs 0085-0086*). Included in the list of contemplated thermal cross-linking agents is: (1) (B) blocked poly-isocyanate (*see paragraph 0086*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a blocked poly-isocyanate cross-linking agent in concert with a photopolymerization initiator in the composition of Bremser et al. because Bremser et al. contemplate dual cure systems that include both a photo-initiator and a thermal cross-linking agent. Furthermore, their list of contemplated thermal cross-linking agents includes a blocked polyisocyanate.

Regarding claim 3, Bremser et al. do not explicitly disclose: (3) wherein the unsaturated group-modified cationic epoxy resin (A) having the cationic group has an unsaturated group equivalent of 6000 or less. However, it appears that their reactant ratio range (*see paragraph 0068 and claim 2*) would have inherently or obviously yielded a product featuring this unsaturated group equivalent range.

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Therefore, it appears that the unsaturated group-modified cationic epoxy resin of Bremser et al. would have inherently or obviously featured an unsaturated group equivalent of 6000 or less. This is in light of reactant ratio range contemplated by Bremser et al.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bremser et al. (US Pat. No. 6,201,043) discloses the instantly claimed component (A); however, they do not disclose the instantly claimed composition.

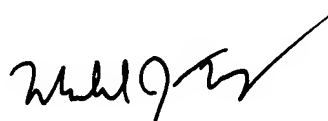
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Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael J. Feely
Primary Examiner
Art Unit 1712

June 15, 2007

**MICHAEL FEELY
PRIMARY EXAMINER**